

## **SEC Future Programs**

• Grand Challenges - Rich Vondrak / GSFC





# **SEC Grand Challenges**

2000 - 2040



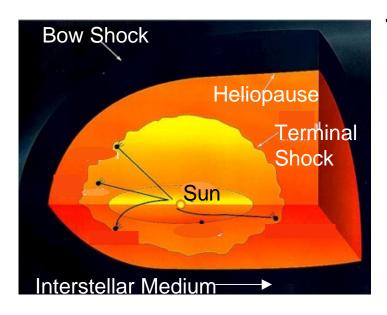
Voyages to Nearby Stars

Expanding Our Home in the Solar System





#### **Voyages to Nearby Stars**

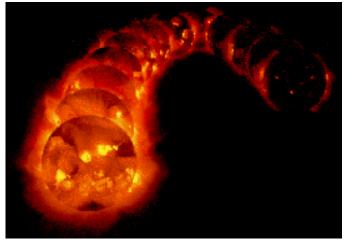


#### **Destination**

 Spacecraft traveling beyond the boundaries of the solar system towards nearby stars



 Observations of the Sun's interior



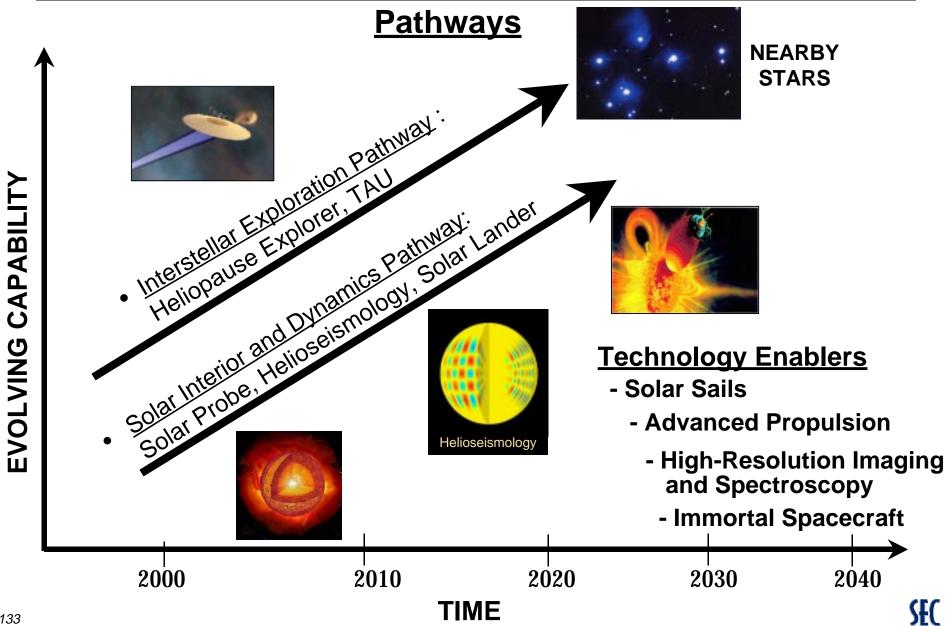
 Understanding of longterm solar and stellar evolution and dynamics





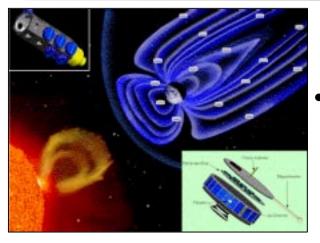


### **Voyages to Nearby Stars**





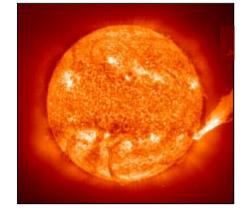
### **Expanding Our Home in the Solar System**

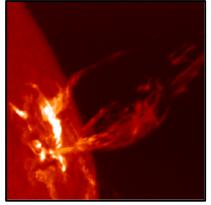


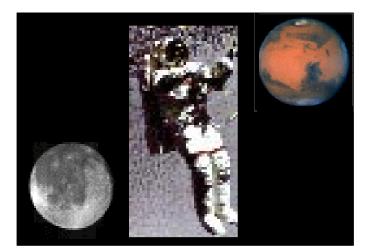
#### **Destination**

Understanding of geospace processes to develop a predictive capability for local space weather

 Comprehensive measurements of the global Sun and of the spatial evolution of CME's







 An ability to predict space weather wherever humans may travel (Earth orbit, Moon, L1, Asteroids, Mars, etc.)



## **Expanding Our Home in the Solar System**

